Electronic Supplementary Information (ESI) for

A new rhodamine-derived fluorescent chemodosimeter for Cu^{2+} in aqueous solution and its application in living cell imaging

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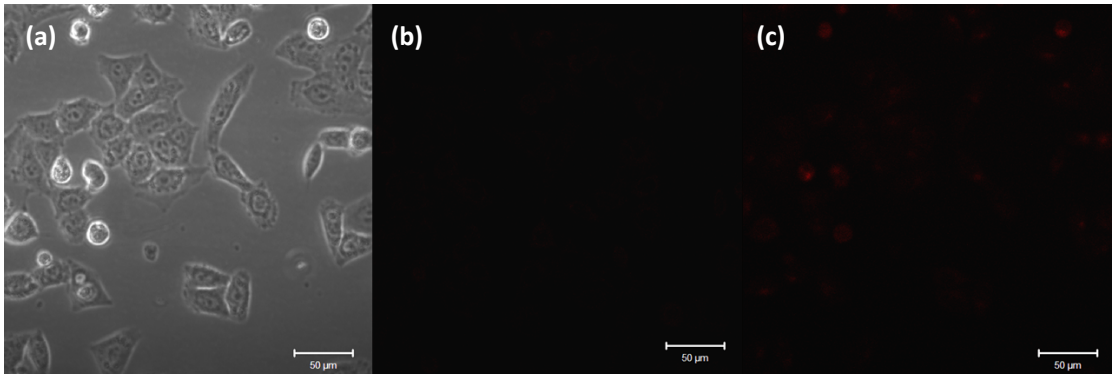

Fig. S1. Bright field (a) and confocal fluorescence (b, c) of Hela cells, incubated with **1** (10 μM) for 30 min at 37 °C (b) and further incubated with addition of Cu^{2+} (20 μM) for another 60 min at 37 °C (d–f), respectively.

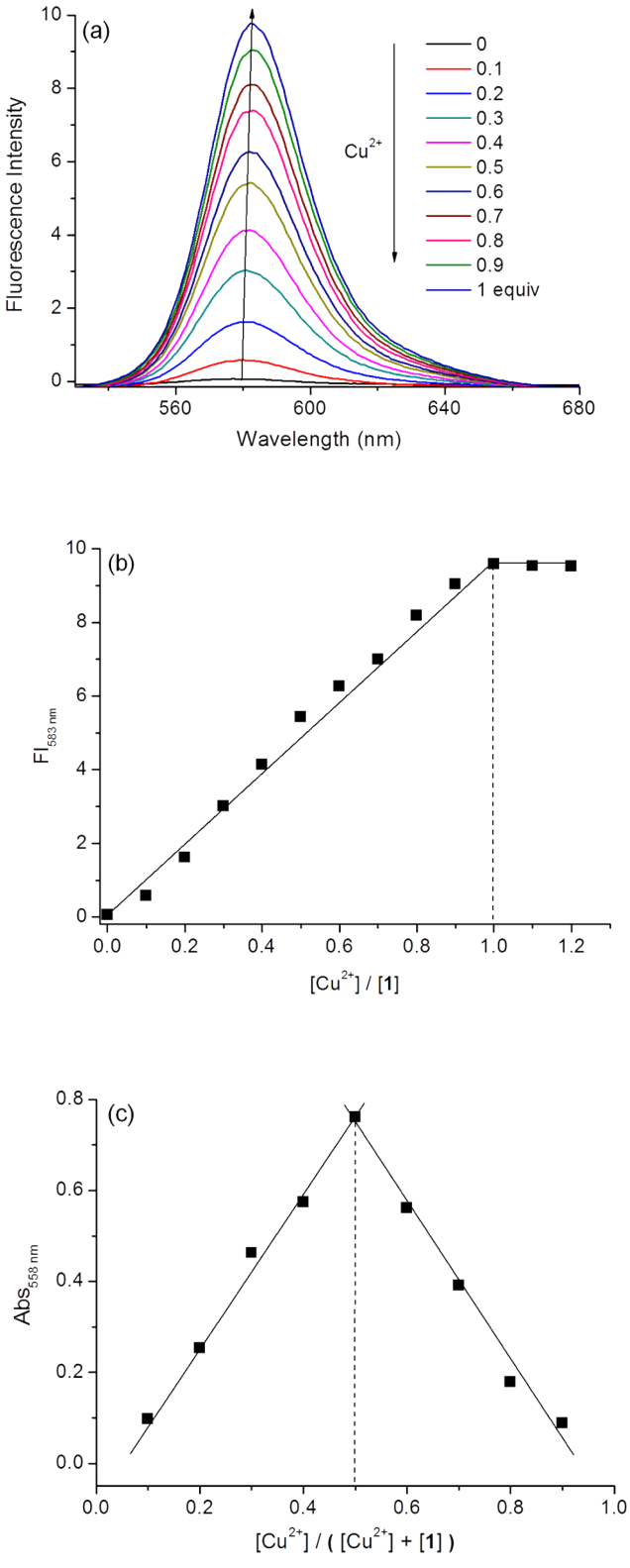

Fig. S2. Fluorescence spectral (a) and intensity (b) changes of **1** (10 μM) upon addition of various amounts of Cu^{2+}, and Job's plot (c) for **1**–Cu^{2+} complex ([Cu^{2+} + [**1**] = 150 μM) in CH_3CN. Excitation and emission wavelengths are 520 and 583 nm, respectively.

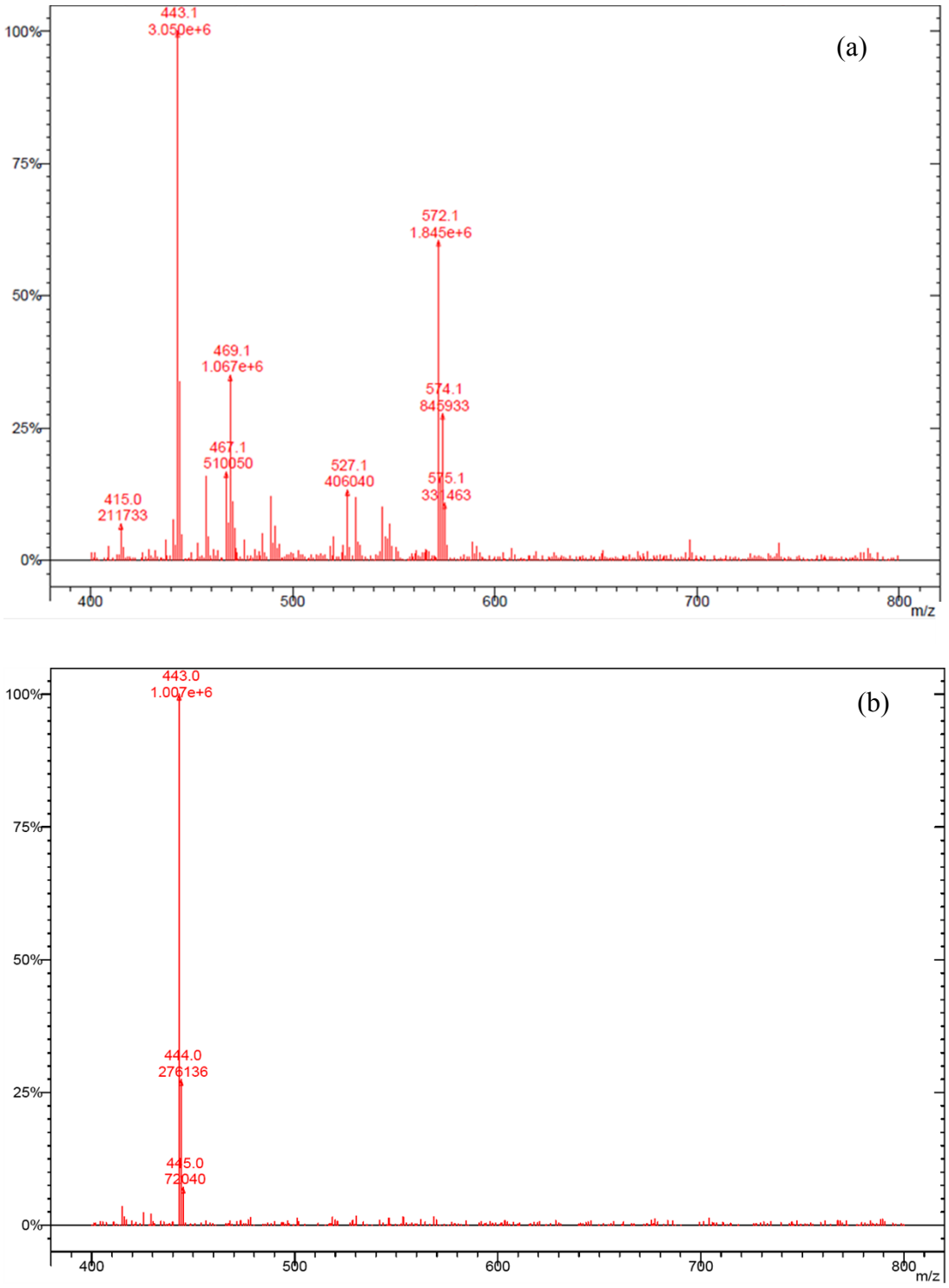

Fig. S3. ESI-MS analysis of the mixture of **1** with 2 equiv of Cu^{2+} in CH_3CN (a) and after standing 60 min with addition of water (b).

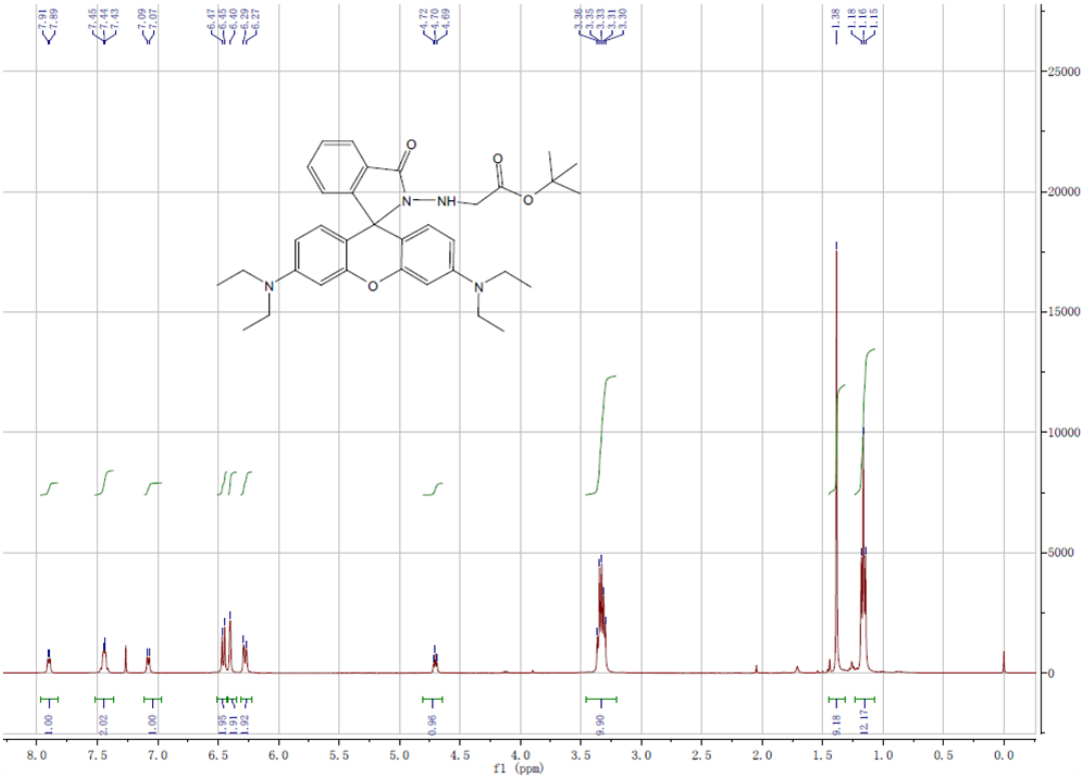

Fig. S4. ^{1}H NMR spectrum of **2** in $CDCl_3$.

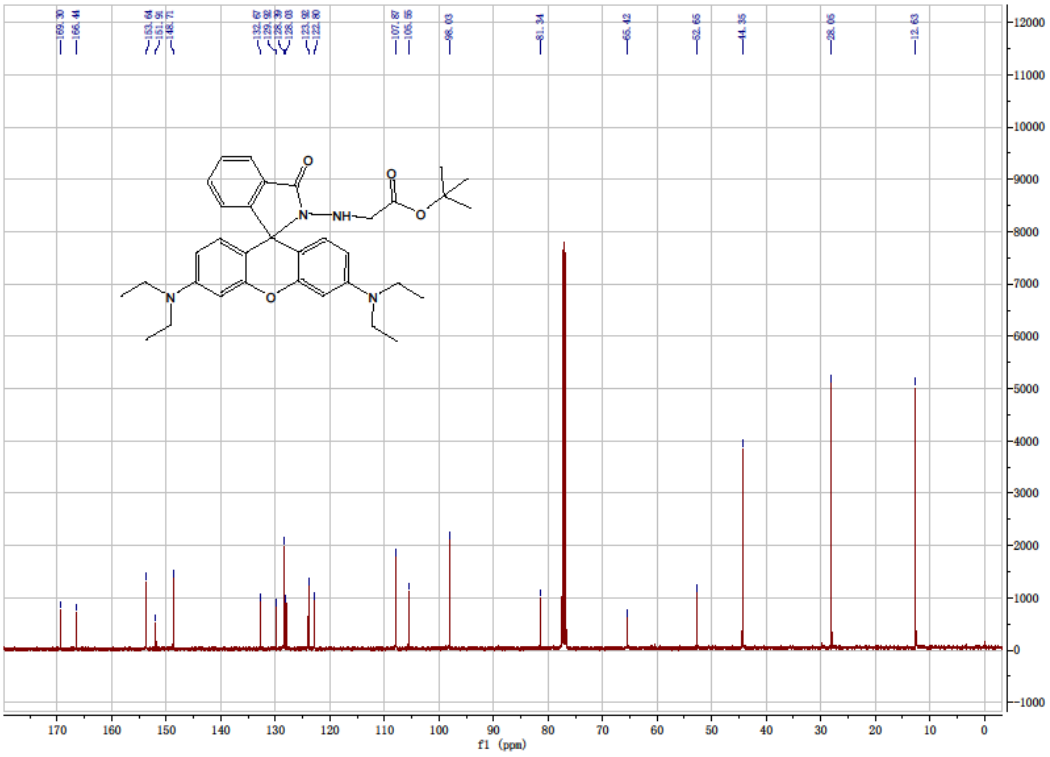

Fig. S5. ^{13}C NMR spectrum of **2** in $CDCl_3$.

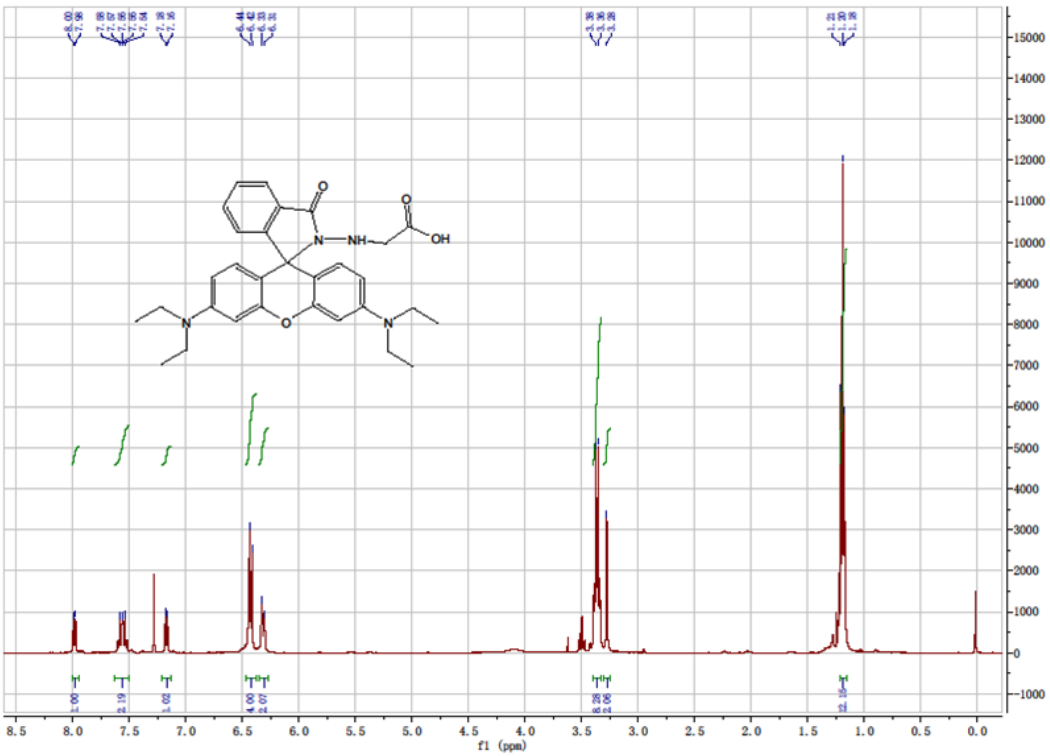

Fig. S6. ^{1}H NMR spectrum of **1** in $CDCl_3$.

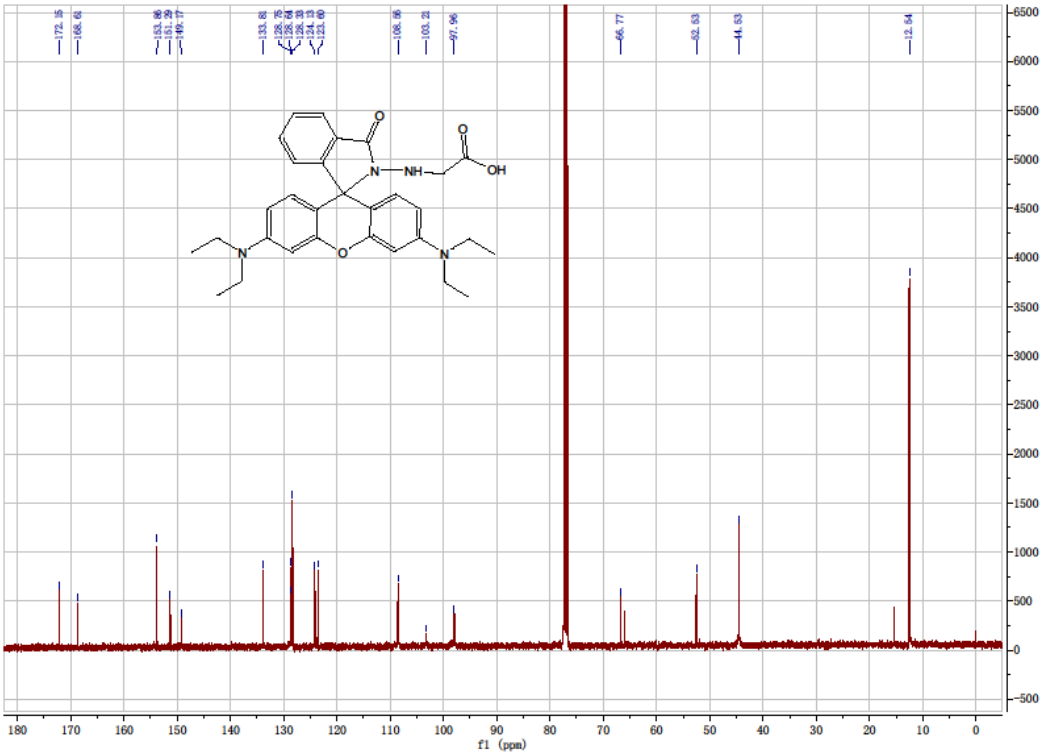

Fig. S7. ^{13}C NMR spectrum of **1** in $CDCl_3$.

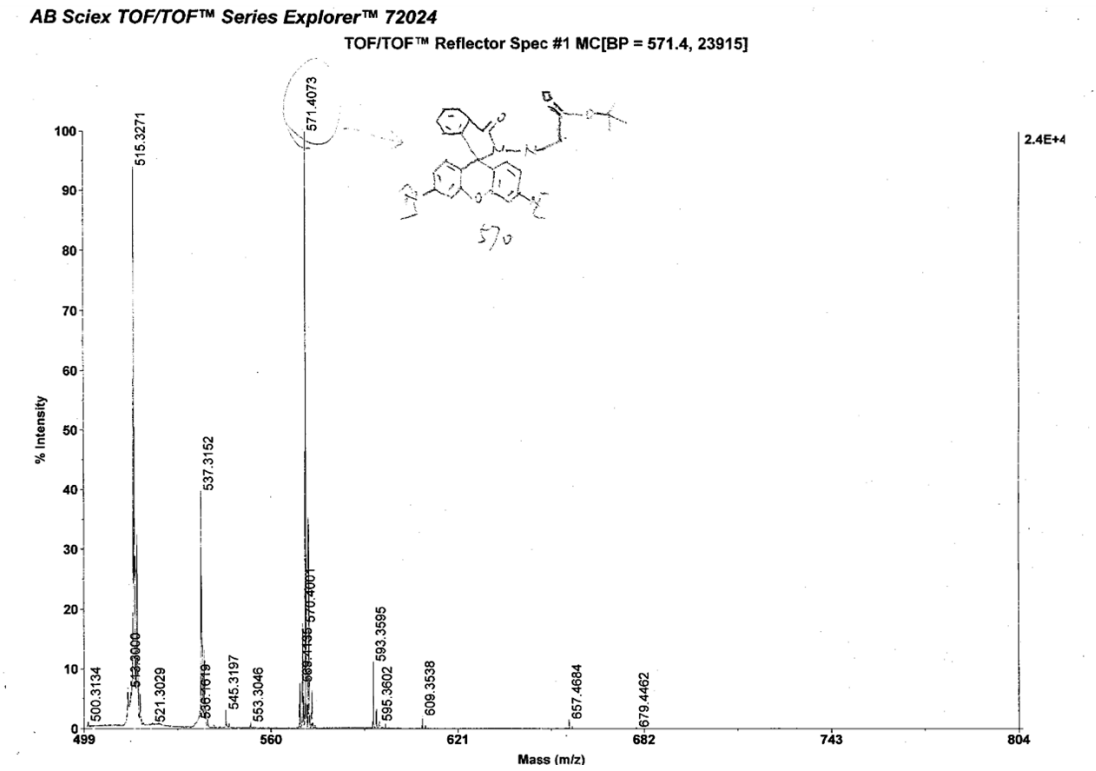

Fig. S8. Mass spectrum of **2**.

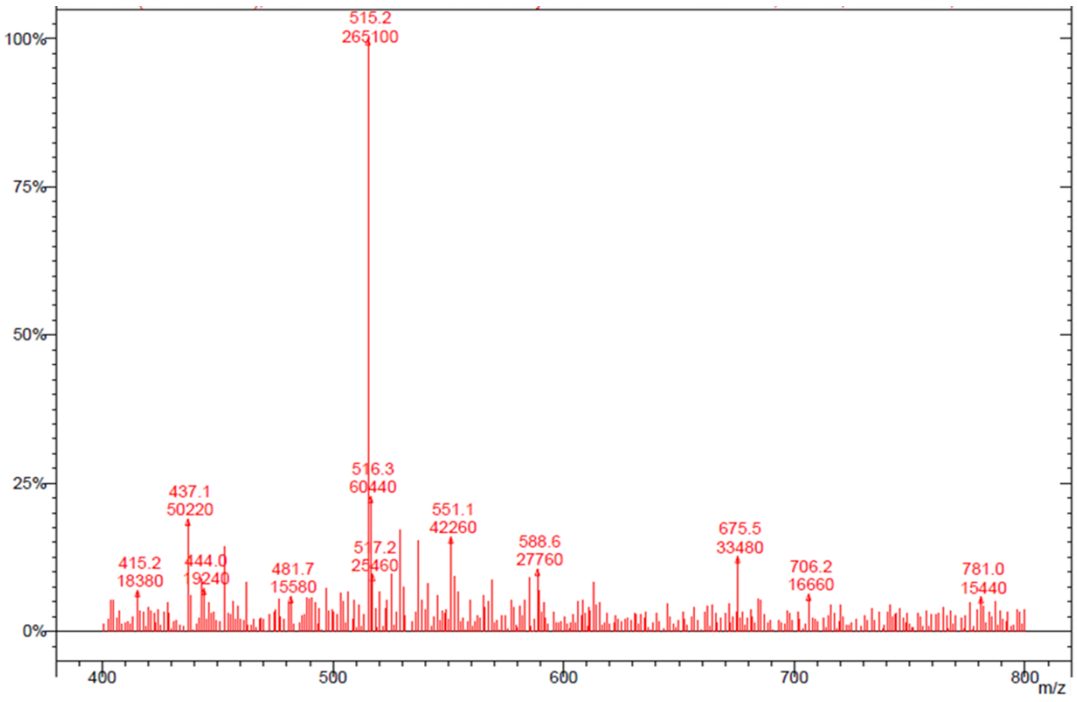

Fig. S9. Mass spectrum of **1**.